

Product datasheet for RC231649

OriGene Technologies, Inc.

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Glutaredoxin 1 (GLRX) (NM_001243658) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Glutaredoxin 1 (GLRX) (NM 001243658) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Glutaredoxin 1

Synonyms: GRX; GRX1

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC231649 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCTCAAGAGTTTGTGAACTGCAAAATCCAGCCTGGGAAGGTGGTTGTGTTCATCAAGCCCACCTGCC CGTACTGCAGGAGGGCCCAAGAGATCCTCAGTCAATTGCCCATCAAACAAGGGCTTCTGGAATTTGTCGA TATCACAGCCACCAACCACCACTAACGAGATTCAAGATTATTTGCAACAGCTCACGGGAGCAAGAACGGTG CCTCGAGTCTTTATTGGTAAAGATTGTATAGGCGGATGCAGTGATCTAGTCTCTTTGCAACAGAGTGGGG

AACTGCTGACGCGGCTAAAGCAGATTGGAGCTCTGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC231649 protein sequence

Red=Cloning site Green=Tags(s)

MAQEFVNCKIQPGKVVVFIKPTCPYCRRAQEILSQLPIKQGLLEFVDITATNHTNEIQDYLQQLTGARTV

PRVFIGKDCIGGCSDLVSLQQSGELLTRLKQIGALQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6037 e10.zip

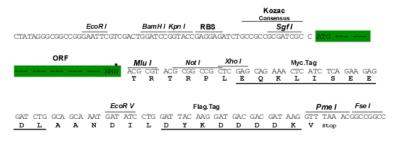
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001243658

ORF Size: 318 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeg: NM 001243658.2

RefSeq Size: 1497 bp RefSeq ORF: 321 bp



 Locus ID:
 2745

 UniProt ID:
 P35754

 Cytogenetics:
 5q15

Protein Families: Druggable Genome

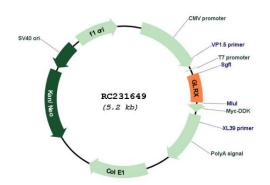
MW: 11.8 kDa

Gene Summary: This gene encodes a member of the glutaredoxin family. The encoded protein is a

cytoplasmic enzyme catalyzing the reversible reduction of glutathione-protein mixed disulfides. This enzyme highly contributes to the antioxidant defense system. It is crucial for several signalling pathways by controlling the S-glutathionylation status of signalling mediators. It is involved in beta-amyloid toxicity and Alzheimer's disease. Multiple alternatively spliced transcript variants encoding the same protein have been identified.

[provided by RefSeq, Aug 2011]

Product images:



Circular map for RC231649